

Description

CAMERA CARRIER

BACKGROUND OF INVENTION

[0001] Carriers for cameras are well known in the art. Generally they take one of three forms, bags, shoulder straps and chest harnesses. The first form is a camera bag usually having a shoulder strap for carrying the bag and the contents in the bag. Such bags generally have various compartments for camera components and the camera and will have a top that is closeable, for example, with a zipper. Such bags are generally well designed and effective for their intended purpose, *i.e.*, carrying a camera, film and accessories. However, in order to use the camera the bag must be opened, the camera removed, used and re-bagged. While the camera case is open, items contained within the bag can be lost or spilled. Further, camera bags tend to be larger than needed for just the camera and are relatively expensive.

[0002] Two other means for carrying cameras have been provided and are well known in the industry. Those include shoul-

der straps and chest harness arrangements. Shoulder straps, while good, permit the cameras to move freely limited only by the strap and the photographers body. Straps allow bouncing and swinging of the camera and some discomfort and inconvenience during carrying. Further, by the camera being substantially unrestrained, the camera may also bang into objects and become damaged. With a long or telephoto lens, cameras carried on a strap have a tendency to point downwardly because of the camera's center of gravity. Carrying a camera with a shoulder strap can also result in the camera falling from ones shoulder or provide an opportunity for the camera to be easily stolen. To alleviate some of the aforementioned problems, shoulder straps have been provided with a waist belt arrangement to help secure the camera in place during carrying, however this requires a release from the waist belt to make the camera ready to use. Chest harnesses are well known in the industry for carrying a camera in a position in front of ones upper torso. The chest harness can position the camera adjacent ones chest or abdomen. Such an arrangement normally carries the camera in a lens forward position exposing the lens to damage from bumping or falling of the user.

[0003] While each of the above described camera carrying devices have their benefits and are generally effective, they do have drawbacks, particularly when they are used to carry a camera with a long lens, such as a telephoto lens that projects from the front of the camera body to any extent. A typical camera carried by the aforementioned devices is a 35 mm SLR (single lens reflex) camera. 35 mm cameras tend to have a body and a removable lens. Typically lenses project 1½ to 6 inches from the front of the camera and even more for high magnification and first lens cameras with some lens being over a foot in length. There is thus a need for an improved camera carrying device, particularly for those cameras having a long front lens but is also useable with cameras having short to medium length lenses.

SUMMARY OF INVENTION

[0004] The present invention involves the provision of a camera carrying device including an attachment system for securing a camera receptacle to a person preferably allowing the receptacle and contained camera to be moved to various positions on a person. The attachment system may include a waist belt sleeve forming member for attaching a backing and receptacle to the waist belt. The lens of the camera may be inserted into an interior chamber of the

receptacle and have the camera body rest on a stop. The receptacle forming member may be constructed to provide a fixed size chamber interior or an adjustable size interior. A retainer may be provided to releaseably retain a camera with the lens received in the chamber.

BRIEF DESCRIPTION OF DRAWINGS

- [0005] Fig. 1 is a perspective view of a camera carrying device with a camera being carried thereby.
- [0006] Fig. 2 is a perspective view of the camera carrying device without a camera.
- [0007] Fig. 3 is a top plan view of the camera carrying device of Figs. 1 and 2 showing portions of the carrying device separated to better illustrate detail.
- [0008] Fig. 4 is a back elevation view of the camera carrying device of Figs. 1-3.
- [0009] Fig. 5 is a perspective view of a modified form of camera carrying device.
- [0010] Fig. 6 is a top plan view of the camera carrying device of Fig. 5.
- [0011] Fig. 7 is a back elevation view of the carrying device of Figs. 5, 6.
- [0012] Fig. 8 is a perspective view of a modified form of camera retaining device usable in either of the forms of the cam-

era carrying device of Figs. 1–7.

[0013] Like numbers throughout the drawings designate like or similar parts as are more fully described in the below description of the invention.

DETAILED DESCRIPTION

[0014] As seen in Fig. 1, a camera 1 is releasably carried by a carrier device designated generally 3. The carrier 3 is comprised generally of an attachment system 5 and a camera receptacle designated generally 7 (and denoted 7A in the embodiment shown in Figs. 1 – 4) mounted to the attachment system. The receptacle 7 is shown as including a backing 9 secured to a receptacle forming member or device 11 forming a chamber 12 for receipt of a portion of the camera 1, such as a lens 13, therein. A retainer device, designated generally 15, is provided for releaseably retaining or securing the camera 1 in carrying relationship to the receptacle 7. As seen, it is preferred that the camera 1 be carried in a lens down, body 14 up position with the camera having at least the portion 16 thereof exposed to assist in its retrieval or removal from the carrier device 3 with a simple move preferably in a single direction. Preferably the body 14 is in an upper position relative to the lens 13 whereby when removed, the users hands will

be in a position for activating the camera, *i.e.*, either its film drive, shutter release or other camera controls being at the ready without significant further manipulation or reorientation of the camera relative to the users hands.

[0015] The attachment system 5 includes a waist belt 17 comprising a strap 21 having an adjustable length and a buckle device 22. The buckle 22 is preferably of a quick release type as is well known in the art. Such buckles come in various forms including side release and front release, either being appropriate. The length of the strap 21 may be adjusted at the buckle 22 as is well known in the art. Preferably the strap 21 is of a webbing type material and can be on the order of 1 to 3 inches in width and preferably has a thickness on the order of about 0.03 to about 0.10 inches. Such a thickness and width will help prevent the strap 21 from curling under the weight of the camera 1 and receptacle 7. The strap 21 is preferably made of woven fibers, either natural or polymeric. Polymers such as nylon are preferred. It is to be understood that the strap 21 may be used as a shoulder strap preferably worn bandoleer style.

[0016] The carrier 3 includes backing 9 which cooperates with the strap 21 to help form the attachment system 5.

Preferably the backing 9 is also made of web material having a width equal to or exceeding that of the width of the strap 21. On the back face 25 of the backing 9, belt loops 27 may be provided for attaching the receptacle 7 to the strap 21. Other means of mounting the receptacle 7 to the strap 21 can be provided. Such are well known in the art. For example, metallic clips can be used. It is preferred that the attachment or mounting of the receptacle 7 to the strap 21 be such that the position of the receptacle 7 relative to the strap 21 may be changed along the length of the strap 21 for convenience of the wearer of the carrier device 3. Thus, the receptacle 7 may be positioned at any position about a person's waist area relative to the buckle 22 which will normally be worn at the front of the person. The belt loops 27 may be in the form of loops formed by a sewing fabric such as webbing material, as described above, to the backing 9. The loops 27 with the backing 9 form sleeves with through holes 29 for receipt of the strap 21 therethrough. The strap 21 overlies the back surface 25 between the inside edges of the belt loops 27 and is unattached to provide access to the surface 25 for a purpose later described.

[0017] Two forms of receptacle 7 are illustrated in the Figures.

Those being designated as 7A and 7B for convenience.

The form of receptacle 7A (Figs. 1 – 4) provides an adjustable size chamber 12 while the receptacle 7B (Figs. 5 – 7) provides a non-adjustable size chamber.

[0018] The receptacle 7A provides for an adjustable size chamber 12. The receptacle 7A is formed by the member 11 that is secured to the backing 9 and being spaced therefrom forming a loop to define an interior chamber 12 between the inner surface of the member 11 and the inside surface 30 of the backing 9. The member 11, as seen, is comprised of a pair of members 32, 33 each of which is attached to the backing 9 as by sewing at 35, 36 respectively. Other means of attaching the members 32, 33 to the backing 9 may be utilized such as adhesion, welding and mechanical fasteners. Additionally, and for example, the attachment of the member 32 or 33 at 35 or 36 respectively could be through the use of hook and loop type fastening members, instead of stitching. The use of hook and loop fastener members would allow for further size adjustment of the chamber 12 if desired. However, it is preferred that permanent attachment of the members 32, 33 to the backing 9 be utilized as opposed to a releasable attachment. The length of the member 11 is longer than

the length of the backing 9 between the areas 35, 36 of attachment between the member 11 and backing 9 for forming the chamber 12. The members 32, 33 have overlapping portions 37, 38 respectively facing one another. The portions 37, 38 have adjacent surfaces 41, 42 respectively. A securement device is provided to secure or attach the portions 37, 38 together in a selectively releasable manner. In the illustrated structure the securement device includes hook and loop fastener members 45, 46, respectively (Fig. 3) with one member being a hook member and the other member being a loop member which provides for the releasable securement of the portions 37 and 38 together while providing connection to one another at various relative positions to provide for adjustment of the size of the chamber 12. Hook and loop fasteners are well known in the art with some being available under the brand Velcro®. The hook and loop members 45, 46 may be suitably secured to the members 37, 38 as by stitching. Adhesive securement may also be used if desired. It is preferred that the chamber 12 be sized to provide a relatively snug fit of the lens of the camera therein but the size and fit may be changed to accommodate personal preference. The body of the camera pro-

vides a shoulder 47 which will rest on the top edges of 48, 49, 50 the backing 9 and members 32, 33, respectively, providing a stop to prevent the camera 1 from falling through the chamber 12.

[0019] A retainer 15 is provided to releaseably retain the camera 1 with its lens 13 mounted to the carrier 3 and the lens at least partially within the chamber 12. The retainer 15 can be in the form of a selectively releasable strap device 51. In the illustrated embodiment, a securement device 55 such as a hook or loop member is secured to the back surface 25 of the backing 9. Selective release may be provided for by the use of interengageable hook and loop fastener members. A securement device 57 such as a hook or loop member can be secured to the outer surface 59 of the member 32. The strap device 51 will have adjacent its free ends corresponding fastener members 61 such as hook and loop members which are interengageable with the hook or loop members 55, 57 to releaseably retain the strap device 51 to the receptacle forming member 11 and the backing 9 bridging across the top open end 62 of the chamber 12 and engageable with the body 14 of the camera 1 to retain at least a portion of the camera lens 13 within the chamber 12. By the use of hook and

loop fasteners, the strap 51 may be easily released at one or both ends allowing removal of the camera at one or both ends and can also provide for adjustability of the length of the strap 51 bridging between the backing 9 and member 32. The strap device 51 may also be provided with two strap portions 51A, 51B connected together also with releasable fasteners 66 such as hook and loop fastener members. While hook and loop fasteners are a particularly useful fastening device, they do however pose the potential of a noise problem in order to effect release of the camera 1 from the carrier device 3. This may be obviated by the use of a buckle 67 shown in phantom in Fig. 8, which buckle is preferably of the quick release type. Such buckles are typically of the side release or center release type and can be released with little, if any, noise.

[0020] As best seen in Figs. 1, 2, a combination lens protector/camera stop designated generally 68 may also be provided. Such a device can be in the form of a strap member 69 utilizing releasable fasteners 70 such as hook and loop fastener devices for securement to the hook or loop member 57 having a cover device 73 secured thereto which when the lens is inserted will preferably cover the entirety of the exposed lens optical elements. The protec-

tor/stop 68 may be adjustable in length through adjustment of the position of the hook and loop members 70 and on the member 57 and may also include a plurality of strap portions joined together by hook and loop members (not shown). Alternatively, the protector/stop 68 may have one end attached to a hook or loop member 57 and the other end attached to the hook or loop member 45.

[0021] As best seen in Figs. 1, 2, a securement safety device, designated generally 71, is shown. The safety device 71 is provided to help ensure that the interconnected fasteners 45, 46 and 61, 57 remain attached. As shown, the securement device 71 includes a strap 72 having a one or more releasable fasteners 74 such as a hook or loop member on one face thereof for securement to the attachment members 45, 57. The strap 72, as illustrated, bridges across the free end 75 and may also be in overlying relationship to a portion of the strap 51B at its area of attachment to the fastening member 57. The use of the securement device 71 also helps ensure that the strap 51 stays attached to the member 57.

[0022] Figs. 5–7 show a modified form of the camera carrier device. The modified form of carrier is designated generally as 103. The modified carrier device 103 includes an at–

tachment system 5, retainer 15 and a backing 9 as described above. The attachment system 5 includes a waist belt 17 comprising a strap 21 and buckle 22. Belt loops 27 are provided on the backing 9 for attaching the belt 16 to the backing 9 as described above. A securement device 57, as described above, may also be provided on the outside face of the backing 9. The carrier 103 differs from the carrier 3 in that the receptacle forming member 111 is non adjustable and is preferably made of a single piece of material with the size or perimeter length of the chamber 112 not being adjustable as through the use of a two piece member as described above. The chamber 112 is formed by the securement of the member 111 to the backing 9. The securement can be by the permanent attachment of at least one portion of the member 111 to the backing 9 as by sewing at 135, 136. Alternately, and by way of example, the attachment at 136 of the member 111 to the backing 9 can be through the use of a releasable means such as a set of hook and loop fastener members, removable lacing, etc. A camera 1 and its lens 13 are releasably mounted to the carrier 103 by a retainer 15 as described above. The retainer 51 can be releaseably secured to a hook and loop fastener member or other

suitable securement device 61 and to a securement device 57 also as described above. A securement safety device 71, as described above may also be provided.

[0023] Thus, there has been shown and described several embodiments of a novel camera carrier. As is evident from the foregoing description, certain aspects of the present invention are not limited by the particular details of the examples illustrated herein and it is therefore contemplated that other modifications and applications, or equivalents thereof, will occur to those skilled in the art. Many changes, modifications, variations and other uses and applications of the present constructions will, however, become apparent to those skilled in the art after considering the specification and the accompanying drawings. All such changes, modifications, variations and other uses and applications which do not depart from the spirit and scope of the invention are deemed to be covered by the invention which is limited only by the claims which follow.